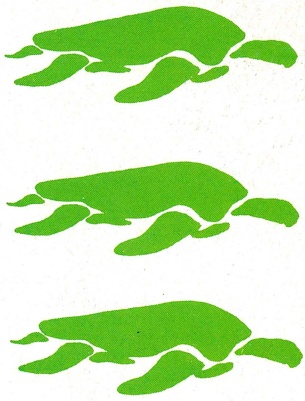
CHAPTER I, ECIA
McDONALD CO. R-1 SCHOOLS

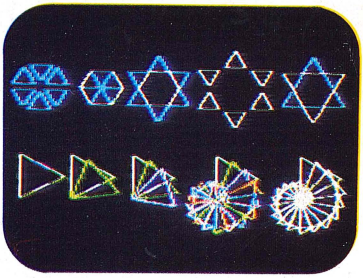
The Original Logo People



Terrapin

1987 Catalog

Terrapin Logo for the Apple II



Easy to learn, simple to use.

Terrapin's widely acclaimed version of Logo is a perfect tool to motivate your students and help reinforce curriculum concepts. Terrapin Logo has been extensively tested in schools and modified to meet the needs of educators. Teachers appreciate Terrapin Logo's versatility, superior documentation and economical packaging. These facts, plus Terrapin's unmatched customer support, make Terrapin Logo the language of choice in education.

Terrapin's enhanced version 3.0 provides both 64K and 128K versions on one disk! It's ideal for classrooms with a mix of both 64K and 128K machines. No other Logo provides this kind of flexibility in one package.

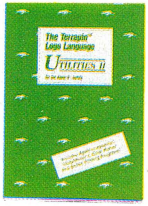
Loading time takes only 15 seconds, allowing for more productive class time. And, if you have 128K, three times more workspace is available.

Terrapin Logo for the Apple comes complete with the award-winning Terrapin Logo Tutorial, Technical Manual, Language disk, Utility disk and Quick-Reference Card providing a comprehensive package for your classroom.

For computer lab settings, Terrapin offers economical Terrapak-10 and -20 lab packs, truly the most cost-effective way for introducing Logo. A networked version for use with Corvus hard disk systems is also available.

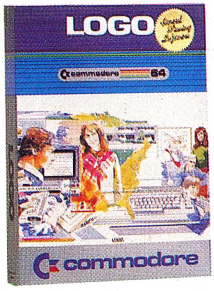
Terrapin Logo	$ 99.95
Terrapak-10	$299.95
Terrapak-20	$525.00
Networked Logo	$399.95

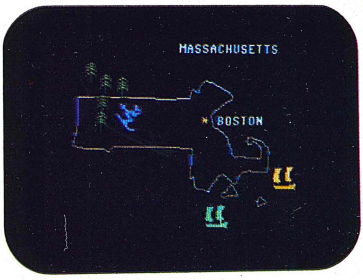
Utilities II Package



The Utilities II Package compliments Terrapin Logo with 36 additional files covering a wide range of Logo uses. Included are programs necessary for screen dumping Logo graphics to the Scribe, Imagewriter and ImageWriter II (color) printers; putting text on the graphics screen; playing games that combine words and graphics; plus many more! The package includes a fully copyable Utilities II disk, and complete documentation ready for insertion in your Logo binder.

Utilities II Package	$ 19.95





Make learning come alive.

Commodore Logo provides an active learning environment for both children and adults. Logo's turtle graphics make Commodore Logo ideal for exploring math concepts in a concrete way. And, with list processing, Logo can be integrated into language arts as well as a variety of other curriculum areas.

Commodore Logo enriches your Logo programming by utilizing the Commodore's outstanding sprite, color and enhanced music capabilities.

Commodore Logo gives you control of up to eight independent turtles. Each turtle can draw lines as well as change its shape, size and color. Several utility files contain pre-defined shapes including animals, vehicles, geometric forms and an animated runner.

With Commodore Logo you can put text on the graphics screen. This feature is ideal for labeling pictures or making word games that combine words and graphics. Text color can also be changed.

The music portion of Commodore Logo uses the Commodore's sound synthesizer chip, expanding music learning through Logo to new dimensions.

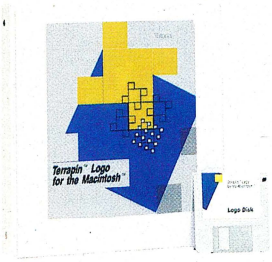
Commodore Logo comes complete with an extensive Tutorial, Language disk and Utility disk to be used with the Commodore 64, 64C and 128 microcomputers. And, Commodore Logo is developed by Terrapin, so you know it's the best.

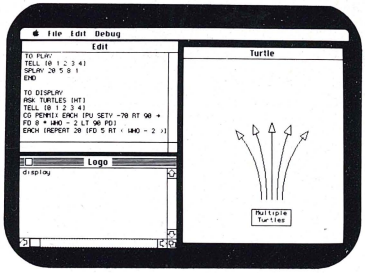
Commodore Logo	$ 69.00
5-Pak (5 Language disks)	$149.00
10-Pak (10 Language disks)	$199.00

Commodore Logo Support Materials

Terrapin continues to support Commodore Logo users with the popular Logo Works™ and Logoware™ series of books and software. These materials, which include Logo Works: Lessons in Logo, The Logo Project Book: Exploring Words and Lists and the Logo Data Toolkit, facilitate the integration of Logo into a variety of curriculum areas.

Terrapin Logo for the Macintosh





Logo and the power of the Macintosh.

Terrapin™ Logo for the Macintosh™ combines the most popular features of Terrapin Logo for the Apple II and Commodore 64 with the power and ease of use of the Macintosh. It provides more workspace, is considerably faster and uses the standard interface of windows and pull-down menus. Plus, each graphics window supports multiple turtles, creating a new dimension in Logo programming. Advanced features include multi-dimensional arrays, strings, extended CATCH and THROW, stream I/O, property lists, automatic load-on-call and much more.

Terrapin Logo for the Macintosh runs on any Macintosh or Macintosh Plus with 512K or more. Comes complete with Tutorial and Reference Guide.

Terrapin Logo for the Macintosh	$ 79.95
MacPak-10 (10 Disks)	$399.95
MacPak-20 (20 Disks)	$699.95

Terrapin Music Logo

Music for everyone!

A new set of music primitives replaces the graphics portion of the Logo language to bring you Terrapin™ Music Logo. The result is a unique toolkit for composing in six voices simultaneously—in a truly procedural environment. And, being an extensible language, Logo is ideally suited for you to explore music concepts. Developed in conjunction with Jeanne Bamberger, well-known music theorist from MIT, Music Logo is a laboratory for experimentation in musical perception, intended for a wide spectrum of users. Terrapin Music Logo runs on the Apple II family of computers in 64K. Comes complete with comprehensive Sourcebook, Music Logo Language disk with backup, and Projects disk.

(An ALF synthesizer board, game paddles, amplifier and speakers (or home stereo) are required. Ordering information for ALF board is included with package.)

Terrapin Music Logo	$ 99.95

ORDER FORM

	Item / Title	Unit Price	Total

Sub Total	
5% Sales Tax (MA residents only)	
Shipping (See ***Shipping Charges*** section)	
Total Amount	

SHIPPING CHARGES:
Terrapin Logo for the Apple, Tutorials, Terrapin Music Logo and Terrapin Logo for the Macintosh: U.S. orders, add $5.00. Canadian orders, add $6.00. Overseas orders, add $7.00 per unit.

Commodore Logo, Logo Data Toolkit and books in the Logo Works series: U.S. and Canadian or… add $2.50 for first item, $1.00 each additional. Overseas orders, add $6.00 for first item, $… ach additional.

No shipping charge for Backup disk, Utilities II Package, Demo Kit, upgrades or trade-ins.

FREIGHT:
All prices FOB Cambridge, MA, USA. U.S. orders sent via UPS, Canadian via U.S. mail, overseas orders via surface parcel post, unless otherwise requested.

CREDIT:
Purchase orders accepted for amounts over $30.00 from U.S. and Canadian schools (excluding upgrades and trade-ins). Other orders should be prepaid or C.O.D. (U.S. only). All overseas orders must be prepaid. Telex for bank wire information. Credit terms: Net 30. All prices subject to change without notice.

Send to _____

Address _____

_____

City _____ State _____ Zip _____

Phone _____

Charge Card Information: MC VISA (circle one)

Card # _____ Exp. Date _____

Signature _____

'errapin

'0.

ı four
the Logo Data
ıanipulate and
d to meet your

es and things
ports

ıtitudes
friends
f the results

ted data
ect areas

collected data

ıters

oughout the
room activity
projects
fic areas of
ta conversion
e provided.
lore Logo.

$ 49.95
$ 49.95

Terrapin

ADDITIONAL ITEMS

Demo Kit—Terrapin Logo for the Apple
Self-running demonstration that gives an overview of the capabilities of the Terrapin Logo Language including sample programs and games. Kit includes demo disk and information on Terrapin Logo and Terrapin products. Disk is fully copyable. Requires 128K Apple II . Color monitor recommended.
$ 5.00

Mindstorms: Children, Computers and Powerful Ideas by Seymour Papert
An excellent book that covers the origins and the philosophies of the Logo Language.
$ 7.95

Terrapin Logo for the Apple Tutorial
Award-winning documentation for the Terrapin Logo Language (Language and Utility disks not included).
$30.00

Backup Disk—Terrapin Logo for the Apple
Requires Terrapin Logo warranty card or proof of purchase (limit one backup per Logo purchase).
$15.00

Terrapin Upgrades*
version 1.0,1.3 or 2.0 to 3.0 **$20.00**

Trade-Ins*
Apple or Krell Logo to Terrapin 3.0 **$20.00**

* $7.50 for each additional upgrade or trade-in with same order. Old Language disk(s) must accompany payment.

Logo and t

Terrapin™ Logo
Terrapin Logo for
use of the Macint
the standard interf
supports multiple
Advanced features
THROW, stream I

Terrapin Logo for
512K or more. Cc

Terrapin

from MIT, Music
intended for a wi
family of comput
Music Logo Lan

(An ALF synthesizer boa
amplifier and speakers (o
required. Ordering inforn
is included with package.

Terrapin Inc.
222 Third Street, Cambridge, MA 02142
(617) 492-8816
Telex, 294116 BOSTLX UR ATTN: TERRAPIN

ORDER FORM

	Item / Title	Unit Price	Total
		Sub Total	
		5% Sales Tax (MA residents only)	
		Shipping (See ***Shipping Charges*** section)	
		Total Amount	

SHIPPING CHARGES:
Terrapin Logo for the Apple, Tutorials, Terrapin Music Logo and Terrapin Logo for the Macintosh: U.S. orders, add $5.00. Canadian orders, add $6.00. Overseas orders, add $7.00 per unit.

Commodore Logo, Logo Data Toolkit and books in the Logo Works series: U.S. and Canadian or[illegible]add $2.50 for first item, $1.00 each additional. Overseas orders, add $6.00 for first item, $[illegible]ch additional.

No shipping charge for Backup disk, Utilities II Package, Demo Kit, upgrades or trade-ins.

FREIGHT:
All prices FOB Cambridge, MA, USA. U.S. orders sent via UPS, Canadian via U.S. mail, overseas orders via surface parcel post, unless otherwise requested.

CREDIT:
Purchase orders accepted for amounts over $30.00 from U.S. and Canadian schools (excluding upgrades and trade-ins). Other orders should be prepaid or C.O.D. (U.S. only). All overseas orders must be prepaid. Telex for bank wire information. Credit terms: Net 30. All prices subject to change without notice.

Send to _____

Address _____

_____

City _____ State _____ Zip _____

Phone _____

Charge Card Information: MC VISA (circle one)

Card # _____ Exp. Date _____

Signature _____

'0.

ı four
the Logo Data
ıanipulate and
d to meet your

es and things
ports

ttitudes
friends
f the results

ted data
ect areas

collected data

nters

oughout the
room activity
ı projects
fic areas of
ıta conversion
e provided.
lore Logo.

$ 49.95
$ 49.95

Terrap

Logo and

Terrapin™ Lo
Terrapin Logo
use of the Ma
the standard ii
supports multi
Advanced feat
THROW, strea

Terrapin Logo
512K or more

Terrap

from MIT, M
intended for
family of cor
Music Logo

(An ALF synthesiz
amplifier and speal
required. Ordering
is included with pa

ADDITIONAL ITEMS

Demo Kit—Terrapin Logo for the Apple
Self-running demonstration that gives an overview of the capabilities of the Terrapin Logo Language including sample programs and games. Kit includes demo disk and information on Terrapin Logo and Terrapin products. Disk is fully copyable. Requires 128K Apple II . Color monitor recommended.
$ 5.00

Mindstorms: Children, Computers and Powerful Ideas by Seymour Papert
An excellent book that covers the origins and the philosophies of the Logo Language.
$ 7.95

Terrapin Logo for the Apple Tutorial
Award-winning documentation for the Terrapin Logo Language (Language and Utility disks not included). **$30.00**

Backup Disk—Terrapin Logo for the Apple
Requires Terrapin Logo warranty card or proof of purchase (limit one backup per Logo purchase).
$15.00

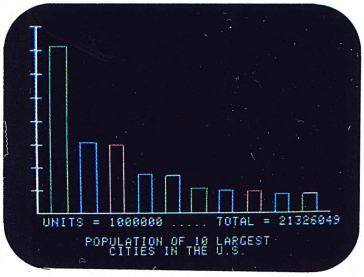
Terrapin Upgrades*
version 1.0,1.3 or 2.0 to 3.0 **$20.00**

Trade-Ins*
Apple or Krell Logo to Terrapin 3.0 **$20.00**

* $7.50 for each additional upgrade or trade-in with same order. Old Language disk(s) must accompany payment.

Terrapin Inc.
222 Third Street, Cambridge, MA 02142
(617) 492-8816
Telex, 294116 BOSTLX UR ATTN: TERRAPIN

Logo Data ToolKit



Explore and manipulate data through Logo.

The Logo Data Toolkit uses Logo to explore data handling through four comprehensive software tools. Students and teachers alike can use the Logo Data Toolkit in any curriculum area. With these tools you can gather, manipulate and analyze data. Each program is written in Logo and can be modified to meet your individual needs. The software tools include:

Database Tool
- Organize information about people, places and things
- Design, edit, examine, sort and print reports
- Format and print mailing labels

Survey Tool
- Study popular preferences, trends and attitudes
- Create surveys and poll classmates and friends
- Print out surveys and generate reports of the results

Associations Tool
- Set up associated word pairs or phrases
- Play matching games or quizzes on related data
- Make up trivia games for different subject areas

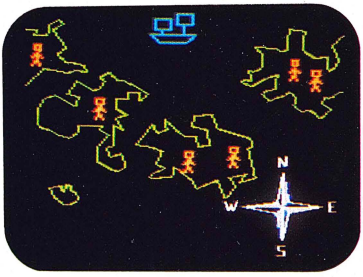
Charts Tool
- Generate pie, line and bar charts from collected data
- Display a data table of percentages
- Print out charts on parallel or serial printers

The Logo Data Toolkit can be adapted to any subject and used throughout the year. With the package, you receive a manual with numerous classroom activity ideas, as well as a tutorial on each tool. Four integrated classroom projects utilize all the Toolkit programs to gather and analyze data in specific areas of interest. Appendices cover information on the sample data files, data conversion programs and frequently used tool procedures. Printing routines are provided. For use with Terrapin Logo for the Apple (2.0 or 3.0) or Commodore Logo.

Logo Data Toolkit	
Terrapin Logo version	$ 49.95
Commodore Logo version	$ 49.95

Logo Works Curriculum Materials

Logo Works™ : Lessons in Logo



Developed by teachers, for teachers.

Logo Works: Lessons in Logo is a set of comprehensive curriculum materials designed to introduce and integrate Logo into the 4th to 8th grade geometry and computer literacy curriculum. Using *Logo Works: Lessons in Logo* your students will gain a greater comprehension of the concepts you teach through their own application of those concepts.

Logo Works: Lessons in Logo is a result of a two-year state funded project in the Chapel Hill-Carrboro City Schools in Chapel Hill, North Carolina. The goal was to create a set of materials that could be used successfully by all teachers, including those with little Logo experience—as well as being fun and challenging to students. *Logo Works* serves as a tool for expanding students' knowledge of mathematics and computer literacy.

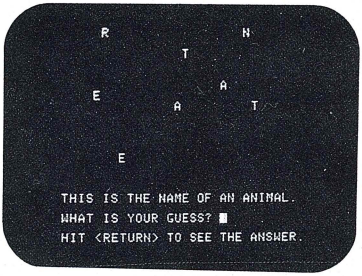
The package includes a Student Book with accompanying Activity disk and comprehensive Teacher's Manual. The seven chapters of the Student Book are carefully organized and sequenced into 47 lessons. Each lesson contains a narrative, set of activities and an open-ended exploration. The Teacher's Manual outlines objectives of each lesson, points to emphasize, potential problem areas, answers to activities, new vocabulary, reproducible masters and more.

Together, the Student Book and Teacher's Manual for *Logo Works: Lessons in Logo* provide a program that will lead to a meaningful learning experience for students and teachers.

For use with Terrapin Logo for the Apple, Apple Logo or Commodore Logo.

Logo Works: Lessons in Logo	$ 29.95
Teacher's Manual	$ 12.95
Logo Works Class Pak (15 books & 1 teacher's manual)	$359.00

The Logo Project Book: Exploring Words and Lists



Finally, words and lists simplified and fun.

The Logo Project Book: Exploring Words and Lists presents a clear and simple introduction to list processing in Logo, taking you beyond turtle graphics. Students are motivated to explore language through exciting projects, such as creating and breaking secret codes. *The Logo Project Book* is appropriate for both students and adults who are familiar with turtle graphics and want to have fun learning about Logo's non-graphics capabilities.

The 14 carefully sequenced projects provide a creative and powerful learning environment for exploring language through Logo. Each section introduces new primitives and programming concepts that are explored while developing particular projects including palindromes, horoscopes and more. Projects are easily modified and will serve as models for creating new ones. New ideas and extensions are included and can be explored at three different levels, challenging even the best students. Sample answers to challenges are given in an appendix.

A comprehensive glossary defines each new primitive with imaginative examples and sample procedures. Arranged alphabetically, you can use the glossary as a dictionary for learning more about particular primitives. Several appendices give additional information on such topics as Commands and Operations, Predicates, and Local and Global Variables.

An Activities disk included with the book is full of sample programs and useful tools. Each of the 25 different disk files can be used "as is" or can be adapted for use in a variety of teaching areas.

For use with Terrapin Logo for the Apple, Apple Logo or Commodore Logo.

The Logo Project Book	$ 19.95
Class Pak (15 books)	$269.00

Why Choose Terrapin Logo Products?

Because Terrapin Logo is simply the best Logo available for both home and classroom use. Terrapin Logo motivates learning by stressing the active role of the student in the learning process, so that "the student teaches the computer." Terrapin is also committed to providing the support you need, through excellent supplementary materials and unmatched customer service.

The Terrapin Logo Language has evolved over more than 12 years, and has been modified through extensive testing with students and teachers. In recent years, Logo has become the predominant microcomputer language used in elementary schools across the nation. It is also gaining worldwide popularity among educators at all levels. More than 175,000 copies of Terrapin Logo are in use in schools, computer clubs and homes worldwide.

Terrapin Logo encourages you to question and explore by providing an active, hands-on problem solving environment. The simple syntax makes it easy for beginners to get started. And, Logo has the flexibility to allow students to explore complex ideas without needing advanced programming skills.

Logo is best known for turtle graphics, the capability to "drive" a turtle (triangular cursor) around the screen. This intuitive and easily grasped way of creating graphics encourages experimentation. Turtle graphics makes mathematics, and particularly geometry, come alive. And, Logo's words and lists commands make Terrapin Logo a superb tool for exploring language as well.

Terrapin continues to publish a growing set of products to ensure your success with Logo year after year. The Logo Works™ series of curriculum support materials integrates Logo into the classroom curriculum, and the all new Logoware™ series of Logo-based applications extends Logo into a number of different subject areas.

With award-winning tutorials, lab packs, networked versions and district pricing arrangements, you can be sure Terrapin products are the best value for your money. And, it's good to know that Terrapin's unsurpassed customer support staff is always available to answer your questions and assist you in any way.

At Terrapin, we realize the important role Logo plays in meeting the needs of educators and students, and we stand committed to supporting and extending Logo's virtually endless applications—through research, modification and development.

The Logo People

Terrapin, Inc., 222 Third St.
Cambridge, MA 02142 (617) 492-8816

Terrapin, Logo Works and Logoware are trademarks of Terrapin, Inc., Commodore is a trademark of Commodore Business Machines, Inc. Apple is a registered trademark of Apple Computer, Inc., Macintosh is a trademark of Apple Computer, Inc.